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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/014,626

10/22/2001

Ridha M. Hamza

1100.1150101

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10/17/2003

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

BHAT, ADITYA S

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,626

Applicant(s)

HAMZA, RIDHA M

Examiner

Aditya S Bhat

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-27 is/are allowed.
- 6) ☒ Claim(s) 28-30 and 32 is/are rejected.
- 7) ☒ Claim(s) 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28-30 & 32 are rejected under 35 U.S.C. 102(e) as being anticipated by McLain et al. (USPUB 2002/0144272)

With regards to claim 28, McLain et al. (USPUB 2002/0144272) teach a method to determine a most likely global position of an object comprising the steps of receiving from a plurality of local systems (page 1, paragraph 0012), data on the most likely position of the object (See figure 1) and

combining the data from the plurality of local systems to generate a value indicative of the most likely global position of the object (102;figure 3).

With regards to claim 30, McLain et al. (USPUB 2002/0144272) teaches at least two of the systems are physically spaced from each other (See figure 1).

With regards to claim 32, Mathis (USPN 5,948,043) teaches providing two or more local systems wherein each local system includes at least one sensor that provides location data and probability distribution for the object (Page 11, Paragraph 25) and

combining the location data and the probability distribution from at least selected local systems to generate a value indicative of the most likely global position of the object. (Page 11, Paragraph 24)

Claim Objections

Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:
Regarding claims 1 and 24:

With regards to claim 1, Lemelson et al. (USPN 6,084,510) teaches a system to determine the position of an object comprising a plurality of sensors (82;see figure 7)(figure 1), a data processor for combining the location data to generate a value indicative of the location (see figure 8).

With regards to claim 24, Faivre et al. (USPN 5,661,486) teaches a method to determine the position of an object comprising a plurality of sensors (2, 5;see figure 1), combining the location data and the uncertainty distributions to generate a value indicative of the objects location (4,6;see figure 1), combining the location data and the uncertainty distributions to generate a probability distribution.

Zhang et al. (USPUB 2002/0165837) and Rasmussen et al. teach uncertainty distribution, however there is no motivation found in the prior art of record to combine the references to arrive upon the claimed invention.

The following is an examiner's statement of reasons for allowance: prior art fail to teach the uncertainty distribution and the probability distribution of a position of an object within the sub-range. These are the features found in the claim(s), as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claim(s) allowable over the prior art.

Claims 2-23 are allowed due to their dependency on claim 1.

Claims 25-27 are allowed due to their dependency on claim 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allowed. This means that the

words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

In this instance it is believed that the prior art reads upon the claimed invention. McLain et al. (USPUB 2002/0144272) teaches that all the platforms send their position information back to the ground station (102;figure 3) and in 112;figure 3 the total probability distribution is determined. It would be inherent to combine the data from 102;figure3 in order to calculate the total probability distribution and arrive on the most likely position of the object.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brown (USPN 5,311,194) teaches a GPS precision approach and landing system for an aircraft, Gounon et al. (USPN 5,757,314) teaches a method and apparatus for accurately determining the position of a masked point by satellite, Frei (USPN 5,252,982) teaches a method of precise position determination, Cohen et al. (USPN 5,572,218) teaches a system and method for generating precise position determinations, Pedersen et al. (USPUB 2002/0026431) teaches a fire detection system and Horvitz et al. (USPN 6,499,025) teaches a system and method for tracking objects by fusing results of multiple sensing modalities.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

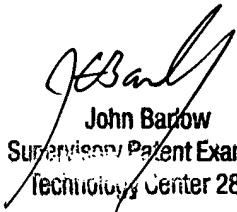
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S Bhat whose telephone number is 703-308-0332. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Aditya Bhat
September 22, 2003


John Barlow
Supervisory Patent Examiner
Technology Center 2800